SUPPLEMENT.

The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1430.—Vol. XXXIII.] LONDON, SATURDAY, JANUARY 17, 1863. [WITH JOURNAL] STAMPED.... SIXPENCE. UNSTAMPED. FIVEPENCE.

Works published at the MINING JOURNAL *office*, 26, *Fleet-street, London.*

PRACTICAL TREATISE ON MINE ENGINEERING. By G. C. GREENWELL. In one vol., half-bound, £2 15s.; whole bound in Morocco, £3 10s. In two vols., half-bound, £3 3s.
TREATISE ON IRON METALLURGY. By S. B. ROGERS. £1 5s.
PROGRESS OF MINING FOR 1861. By J. Y. WATSON. 1s.
STATISTICS OF MINING (ANNUAL). By W. H. CUELL. 6d.
CORNISH NOTES." By J. Y. WATSON F.G.S. 1s.
BRITAIN'S METAL MINES. By J. R. PIKE. 1s.; by post, 13 stamps.
ORIGIN AND PROGRESS OF MINING IN THE CARADON AND LISKEARD DISTRICTS. By WEBB and GEACH. 1s. 6d.; by post, 1s. 8d.
NEW GUIDE TO THE IRON TRADE, OR MILL MANAGERS' AND STOCK-TAKERS' ASSISTANT. By JAMES ROSE. 8s. 6d.
STOCKTAKERS' ASSISTANT AND OFFICE COMPANION. By J. PARIS. 7s. 6d.
MINING AND SMELTING MAGAZINE. Monthly. 1s.
DUNLOP'S CALCULATOR FOR MULTIPLICATION AND DIVISION. 1s. 6d.
CORNWALL AND DEVON MINING DIRECTORY. 1s. 6d.
BOOK-KEEPING BY DOUBLE ENTRY, EXPRESSLY ADAPTED FOR THE IRON TRADE. By G. J. WILLIAMS. Cloth, 10s. 6d.
VENTILATION OF MINES, FOR THE USE OF UNDERGROUND MANAGERS AND OVERMEN. By RALPH MOORE. 5s.
SECTION OF LANARKSHIRE COAL MEASURES (NEW EDITION). By RALPH MOORE. 10s. 6d.
MINERAL VEINS: AN ENQUIRY INTO THEIR ORIGIN, FOUNDED ON A STUDY OF THE AURIFEROUS QUARTZ VEINS OF AUSTRALIA. By THOS. BELT 2s. 6d.; by post, 2s. 8d.
ERRONEOUS COLOURING OF THE MAPS OF THE GOVERNMENT GEOLOGICAL SURVEY OF IRELAND. 1s.
MINERS' MANUAL OF ARITHMETIC AND SURVEYING. By WM. RICKARD. 10s. 6d.; by post, 11s.
TRANSACTIONS OF THE NORTH OF ENGLAND INSTITUTE OF MINING ENGINEERS. Eleven volumes: 21s. per volume. [Single copies can be had.]
TABLES FOR ASCERTAINING THE VALUE OF TINSTUFF. By Capt. CHARLES THOMAS. 5s.
A MANUAL FOR EXPLORERS (How to Search for, and Test Metallic Ores). 1s. 6d.
TAPPING'S HIGH PEAK MINING CUSTOMS. 5s.
TAPPING'S HANDYBOOK ON MERCANTILE, MINING, AND OTHER JOINT STOCK COMPANIES. 2s. 6d.
THE COST-BOOK—TAPPING'S PRIZE ESSAY—WITH NOTES AND APPENDIX. 5s.
TAPPING'S DERBYSHIRE MINING CUSTOMS. 6s.
TAPPING'S COLLIERY AND ORE MINE INSPECTION AND TRUCK ACTS. Cloth, 6s.
TAPPING'S EDITION OF MANLOVE'S CUSTOMS OF THE LEAD MINES OF DERBYSHIRE. 3s.
COST-BOOK SYSTEM—ITS PRINCIPLES AND PRACTICE. 6d.
MINES AND MINING COMPANIES (A Practical Treatise on the Relating to). By WHITTON ARUNDELL. 4s.
MINERS' TABLES. By W. WHITBURN. 4s.
MINING GLOSSARY (SECOND EDITION). 2s.
REMARKS ON THE GEOLOGY OF CORNWALL AND DEVON. By Capt. CHAS. THOMAS, of Dolcoath Mine, Cornwall. 1s. 6d.
ON COPPER SMELTING. By HYDE CLARKE, C.E. 1s.
FORM OF "TACK-NOTE." 5s.
COAL MINES INSPECTION ACT. 6d.
VENTILATION OF COAL MINES. 3d.
CLEVELAND IRONSTONE. By JOSEPH BEWICK. Cloth, 21s.; by post, 21s. 8d.
MASTERS AND WORKMEN. By MARK FRYAR. 6d.
DEVONSHIRE GREAT CONSOLIDATED MINING COMPANY, DESCRIPTION OF THE MINES AND MACHINERY. 6d.
INVENTIONS, IMPROVEMENTS, AND PRACTICE, OF A COLLIERY ENGINEER AND GENERAL MANAGER. By BENJAMIN THOMPSON. 6s.
NEW WORK ON GAS, &c. By W. HOPTON. 1s.
MINES OF CORNWALL AND DEVON (Statistics of, and Observations on), by T. SPARGO. 2s. 6d.
PROPERTIES AND PRICES OF THE METALS CHIEFLY USED IN THE ARTS AND MANUFACTURES. By WM. JOHNSTON. Mounted on rollers, £1 1s.

THE TREGURTHA DOWNS AND OWEN VEAN CONSOLS MINING COMPANY (LIMITED).

Incorporated under the Companies Act, 1862, whereby the liability of the shareholders is expressly limited to the amount of the shares subscribed for.

Capital £40,000, in 16,000 shares of £2 10s. each.

Deposit, 5s. per share on application, and 15s. on allotment.
Calls not to exceed 5s. per share, nor at intervals of less than three months.

DIRECTORS.

THOMAS BAYLIS, Esq., Thames Bank, Fulham.
P. CRUIKSHANK, Esq., 11, Great St. Helen's, Bishopsgate Within.
WM. FELGATE, Esq., 4, Clement's-lane, Lombard-street.
T. E. GREENHOW, Esq., 147, Fenchurch-street.
J. S. ORTON, Esq., 29, Upper Hamilton-terrace.

BANKERS.

Union Bank of London, Princes-street.
Messrs. Vivian, Grylls, Kendall, and Co., Helston.
Messrs. Bolitho, Sons, and Co., Penzance.

SOLICITORS.

H. Grylls Hill, Esq., 17, Barge-yard Chambers.
Messrs. Grylls, Hill, and Hill, Helston.

LONDON MANAGERS.

Messrs. Dunsford and Ranken, 9, Broad-street-buildings.

ABRIDGED PROSPECTUS.

This company (incorporated under the Companies Act, 1862, with limited liability), is formed to work the Tregurtha Downs and Owen Vean Tin and Copper Mines, which are situated in the heart of one of the richest mining districts in Cornwall, being in the parishes of St. Hilary and Perranuthnoe, and surrounded by some of the most productive mines in the county.

Tregurtha Downs Mine was wrought many years ago, and, although it was opened to only a shallow level, and to a very limited extent, it, nevertheless, yielded a profit to the adventurers; but, from the insufficiency of the machinery as the mine was deepened, and from the low prices at which metals and ores then ranged, the working was discontinued. During this time, however, a large amount of valuable work was executed, available for a new company, and, by these and previous operations, the tedious and costly dead work, which must necessarily be done on first opening any mine (and which it would require at least three years to accomplish), is already effected, and the mine is thus already opened, so as to become productive as soon as the respective levels are drained.

The sett is large, extending for nearly a mile in length on the course of the lodes, and about the same in breadth. Several productive lodes of fine tin, three of copper, and also a rich lode of silver-lead have been opened upon. Three of the principal tin lodes form a junction eastward, and at this point of intersection there is no doubt but that very large deposits of mineral will be met with. There are several other lodes which have not been wrought at all, but which present excellent indications, and the sett is traversed by elvans and cross-courses, which are always largely productive of mineral at their intersections of the lodes.

The mine is situated in killas, near to its junction with the granite—a stratum highly congenial for the production of mineral, and of the easiest and cheapest description for sinking and driving.

The workings hitherto have been very shallow, the greatest depth to which the engine-shaft has been sunk being only 60 fms., at which level the richness of the lodes was found to be increasing. This depth—viz., 60 fms.—is trifling compared with that of many of the neighbouring mines by which Tregurtha Downs is surrounded, and which have been so productive—viz., Wheal Fortune, 152 fms.; Enys Wheal Virgin, 150 fms.; Wheal Prosper and Wheal Darlington, 120 fms. each; Wheal Virgin, 115 fms.; Penberthey Crofts, 110 fms. To those who are conversant with mining it is unnecessary to say that many of the best mines only just began to be productive at 50 or 60 fathoms in depth, and that by far the largest returns have been made from much deeper points.

The deepest levels hitherto opened in Tregurtha Downs Mine have not yet been extended under the productive ground, little having been done below 35 fms. on engine-lode, or below 37 fms. on flat-rod lode. And when deeper levels are brought in, immense quantities of tinstuff may be raised, which, at the present high price of tin, would pay very large profits. The copper ore is very rich, some of it having been sold at from £20 to £30 per ton.

Owen Vean Mine is in the parishes of Perranuthnoe and St. Hilary, and immediately adjoins Tregurtha Downs on the west, the same lodes running through both setts, and into Wheal Trevelyan, where they are now yielding rich courses of ore. The deepest point reached in flat-rod shaft is 70 fms., but very little has been done under the 50 fm. level, and although the workings have been so limited this mine has returned £250,000 worth of copper ore, besides large values of tin, and was discontinued working about 20 years ago, chiefly through the low values of copper and tin then ruling, and partly through the engine having been placed in a bad position. Capt. B. Gundry, who was the underground agent, reports that there is a rich lode of copper ore now standing in the 40 and 50 fm. levels, which would readily be set at 3s. in £1 tribute, and that the ground lying between this and Tregurtha Downs, with the grey ore running into it, gives a most excellent prospect. Park shaft is sunk to a depth of only 40 fathoms below the deep adit, where there is a very large lode, with courses of copper ore worth from £18 to £20 per ton. There are also parallel lodes north and south, which have never been wrought at all, but which may be reached by cross-cuts to very great advantage.

The productiveness of the district in which Tregurtha Downs and Owen Vean are situated will be seen from the returns of copper ore yielded by several of the surrounding mines, at some of their more recent workings only, as noted on the respective setts in the map, and of which the following are the most important:—

Mines.	Returns.	Mines.	Returns.
Wheal Fortune	£570,000	Rodney Mines	£31,000
Old Wheal Neptune	400,000	Wheal Trevelyan	26,000
Wheal Friendship	261,000	Gwallon	61,000
Halamanning	283,000	Wheal Caroline	84,000
Owen Vean	250,000	Tolvadden	48,000
Tregurtha Downs	165,000	Trenow Consols	48,000
Marazion Mines	161,000	Trebarvah	32,000
Wheal Charlotte	151,000	Wheal Grylls	47,000
Wheal Darlington	119,000	St. Aubyn and Grylls	65,000
Wheal Jewell	108,000	Wellington, now part of Wheal Grylls	32,000
Wheal Speedwell	167,000		
Guskus	23,000		

The above returns have been extracted from the records preserved in the Museum o Practical Geology, and from other sources. The aggregate of these figures amount to nearly £3,000,000 sterling; and if to this be added the copper produced by the same mines at their earlier and other workings, and by those of the surrounding mines, of which there are no official returns, the total will probably amount to nearly, if not quite, £5,000,000 sterling. For Great Wheal Fortune was worked previously by the ancestors of Sir Charles Lemon, and is said to have given them £300,000 profit, and made the fortune of that family. Wheal Neptune is estimated to have yielded altogether £400,000, and the Marazion Mines, Penberthey Croft, Gwallon, Tregurtha Downs, Owen Vean, Wheal Trevelyan, &c., were all worked previously, and yielded large profits.

There are no official returns of the tin obtained from any of the above mines, but as the district is even richer for tin than for copper, the value of the latter metal returned by them has probably exceeded that of the copper ore which they have produced, forming an immense aggregate of mineral yielded by the immediate district, and which, at the present value of the respective ores, would probably not be over estimated at from £8,000,000 to £10,000,000 sterling.

Several of the surrounding mines are now in full operation, and are making large returns, as Tolvadden, Wheal Charlotte, Wheal Anna, Wheal Grylls, West Wheal Trevelyan, &c.; while the favourable estimate in which the district is held is evinced by the fact that others have been recently put to work again—viz., Wheal Virgin, Gurlyn, and Old Wheal Neptune; and a powerful company has been formed to work the adjoining setts, Wheal Prosper, West Prosper, and East Rodney, jointly with Trevarthian Downs, of which Mr. J. Y. Watson says, in his last "Annual Review of the Progress of Mining" (p. 29), "they have thus far even exceeded the great expectations formed of them at starting." It will be seen by the map that these mines immediately adjoin Tregurtha Downs, and they are now in rich courses of ore, having already sold tin and copper producing £2832 9s. 9d.; in addition to which the tin at surface and in course of stamping and dressing is valued at £2237.

Very careful estimates have been made of the amount of capital required to furnish all the machinery, plant, &c., requisite for putting Tregurtha Downs and Owen Vean Mines to work efficiently, and to bring them into a condition to yield a regular profit to the adventurers. These estimates range from £17,500 to £25,000, according as the mines may yield ores more or less abundantly while being drained; but in order to provide for all possible contingencies, and to ensure a full and advantageous development of the property, the total capital has been fixed at £40,000, in 16,000 shares of £2 10s. each, of which, however, it is not expected that more than from £1 10s. to £2 will ever be required.

The accompanying reports from agents of high respectability and of great experience, who are well acquainted both with the mines themselves and with the district in which they are situate, and from practical miners who have worked in the setts, together with the returns of ore yielded, present unusually copious and conclusive evidence of the mineral richness of the properties themselves, and of the surrounding district, and give a just and well-founded confidence that the investment will prove highly remunerative, while the extent to which the mines are already opened insures immediate and increasing returns; for, whilst the workings are being drained, a great many tributers may be employed on the stopes in the different levels, and large quantities of tin and copper ore may be at once raised, which will assist in meeting the cost of laying the mines open for extensive workings, so as to yield a large profit to the shareholders at an early period.

The dues are exceedingly moderate, being only 1-20th of all the minerals raised.

The liability of the shareholders is strictly limited to the amount of their shares.

Applications for shares may be sent in the accompanying form, but no application will be considered unless a deposit of 5s. on each share applied for is made, for which a receipt will be given, to be afterwards exchanged for share certificates. The deposit may be paid at the company's bankers in London, Helston, or Penzance, if by hand; but applications from the country or by post should be sent to the brokers or managers. Should the directors allot less than the number of shares applied for, the balance of deposit will be appropriated towards the stipulated payment of 15s. per share on allotment, or, should the application not be acceded to, the deposit will be immediately returned without deduction.

Prospectuses, forms of application, and all desired information may be obtained of the brokers or managers, where also may be seen a copy of the Articles of Association, and plans and sections showing the workings, copied from the originals in the Museum of Practical Geology, Jermyn-street.

REPORTS ON TREGURTHA DOWNS AND OWEN VEAN MINES.

In compliance with your request, we have this day inspected the surface of Tregurtha Downs Mines, in the parish of St. Hilary. The sett is very extensive, and is situated in a good mining district. Several lodes are known to pass through its entire length, intersected by cross lodes and elvan courses, which are favourable indications for the production of minerals. Two or three of these lodes have been partially wrought to the depth (as we were informed) of about 60 fms. from surface, and from which large quantities of tin and copper ores have been returned. We do not hesitate to recommend this mine to any party inclined to speculate, believing it to be a valuable property.

WILLIAM ROBERTS, JOHN DAW,
Managers of West Basset, Carn Brea, and Great South Tolgus Mines.

Agreeably to your request, I have this day inspected Tregurtha Downs Mine. The rock in which the lodes occur is clay-slate, and the lodes are composed of gossan, soft friable quartz, chlorite green, blue carbonate of copper, and the red and green oxide and sulphuret of copper, with a little tin ore, and a large elvan course riding on one of the lodes, with a silver-lead lode running north and south. These details correspond in every respect with those which exist at the rich Tolvadden Mine, which is situated to the south-west and joins this mine. The nature of the lodes at the bottom of the mine is proved by the beautiful matrix brought up just before the mine was stopped, and now lying on the surface. I have the greatest confidence in recommending this property as one of the best in the county for exploration, and if it does not remunerate capitalists for their outlay it will be a freak in Nature's laws.

WILLIAM BISHOP, Manager of Lewis Mines.

I believe if this mine is properly worked large quantities of tin and copper will be returned, and good profits paid to the shareholders. There are two or three side lodes wholly unwrought to the south of the above lode, presenting good indications for the production of mineral, and, no doubt, will be found a great auxiliary to the mine.

JOHN VERCOE, Manager of Wheal Jane (but worked at tribute in Tregurtha Downs).

I was employed as a labourer in the mine when it was last worked, and from what I have there seen from old miners who worked there, I believe it to be one of the most valuable setts now idle in the neighbourhood. From the large quantities of tin sold there, at a time when tin was about 45*l.* per ton, I have no doubt large monthly returns of tin will be made, even from the numerous old stulls alone, when the mine is drained to bottom. I should recommend a steam pumping-engine, whim, and stamps to be erected at once, and if the operations are carried on with vigour I have no doubt of Tregurtha Downs becoming a good and lasting concern.

JOHN CURTIS, Manager of St. Aubyn and Grylls.

This mine is wrought by the Marazion Mining Company about 25 or 30 years ago, principally for copper ores, but, on the suspension of these mines, a large quantity of tin was found, amounting, I have heard, to some thousand pounds in value, tin at this period being very low—about £38 or £40 per ton. I consider this sett a good speculation, and would recommend not less than a 70-in. cylinder engine being erected on the old sump, which would command the copper and tin lodes.

A. BENNETT, Manager of Tolvadden Mine.

The situation of the sett, which is very extensive, cannot be surpassed; it is almost surrounded by mines that have yielded an abundance of mineral in copper and tin ores, with proportionate profits to the adventurers. It contains elvan courses and cross-courses, with the other concomitants so essential to profitable mining. Tregurtha north lode is Gear's lode to the east; the lode is to the north of the elvan course, and underlies south, the elvan course underlies north; therefore the lode passes through it, a most favourable circumstance. The engine-shaft sunk by the last workers is on a south lode, to the depth of 37 fms., under an adit of 12 fms. from surface; this lode produced a large quantity of rich tin and copper ore. With a capital of (say) £20,000, a large engine and pitwork for draining the mine of water, you will make a profitable concern.

STEPHEN OSBORNE, late Agent at Wheal Grylls.

I have surveyed the surface of Tregurtha Downs sett, and from its situation and the congenial strata of ground, with a large elvan course passing through it, I fully believe that the lodes when explored will prove very productive; and, with the capital named, I have no doubt a good mine would be obtained, with good profits to the adventurers.

WILLIAM OATS, late Agent at Great Wheal Vor.

I worked in Tregurtha Downs Mine for several months on the south lode, within 15 fms. of Bray's shaft, in the bottom of the 27. I and five other men broke in one month 645 barrows of tinstuff, drawing it all up a winze, and spalling it out in order for sampling, which brought 10s. per barrow, at £36 per ton. I opened good tribute ground in that part of the mine, which turned out large quantities of tinstuff.

STEPHEN OSBORNE, Jun., Wheal Grylls.

These mines are situated in the parish of St. Hilary. The setts are very extensive containing several parallel lodes, composed of copper, tin, and silver-lead, of a superior quality, and there is every indication of their proving as lasting as they are a valuable property. I have carefully gone over the entire area, and on one occasion accompanied Evan Hopkins, Esq., the eminent geologist, who stated in my presence, that if ever there was a good mine in Cornwall, this was sure to be." This opinion I am able, from my own knowledge, to confirm to the fullest extent; I have also ascertained, from undoubted authority, that large sums have been realised from the ores returned from the burrows and halvans. If these mines are put into a full and efficient state of working, there can be no possible doubt that they will at once prove most remunerative; in fact, that immense profits will result to the shareholders.

JOHN ROBERTS,
Late Agent in Wheal Mary.

In accordance with your request, I now beg to submit to you the result of my investigation of the Tregurtha Downs Consolidated Mines, and in doing so to state that the favourable character I had previously heard of them is fully borne out by facts. The sett is very extensive; it consists of several productive lodes of fine tin, three of copper, and also a rich one of silver-lead. Three of the principal tin lodes form a junction eastward near the water stile shaft, and at this point an immense body of mineral of a valuable kind exists. The workings are here down only 30 fms., and the certainty of large results being obtained from this point of intersection is beyond all doubt. There are also a number of other lodes not yet proved. I find that the workings hitherto have been of a very limited kind. The greatest depth of shaft yet attained is 60 fms., at which level the richness of the lodes increases. The mines are traversed by an elvan course, against which lodes are invariably productive, as well as by the lead lode before alluded to. From these circumstances, it is my conviction that, by the judicious employment of adequate means, a future company could not fail in realising immense returns upon their investment. I should recommend the erection of an engine of 70-in. cylinder, and 18-in. pumps, with proper gear, &c.; this would be sufficient for the working of the mines to a depth 15 0 fms. below adit. A steam-stamps of considerable power should also be provided, of immediately on the engine commencing working large quantities of tinstuff will be raised, and a crusher for the copper would likewise be required. For these purposes, and rar fully developing and working these valuable mines, I should recommend a capital of of20,000, but as they would return ores at a very early period, I do not think it would be necessary to call the whole amount up. In conclusion, I must say that in my experience, which is considerable, I have never met with a more promising mineral property than this is; and I do not hesitate to repeat that, if efficiently worked, it must speedily make one of the richest and most durable mines in the county.

JAMES THOMAS, late Agent of Halamanning Mines.

In submitting to you my report of the Tregurtha Downs Consolidated Mines, allow me to say that I fully agree in every particular with Capt. James Thomas as to the highly favourable character of the sett. Looking at the number and extent of the above lodes, also to that of silver-lead of a rich quality, and the great facilities that exist for working these mines, I can assert, without hesitation, that the prospects of immediate as well as permanent large profits are of a nature seldom to be met with, and that it is my conviction, that with proper management they will not be surpassed by any in the county, and that I would confidently recommend them to the notice of anyone seeking a safe and lucrative investment.

PETER FLOYD, late of Tincroft Mines.

In handing you my report of the Tregurtha Downs Consolidated Mines, I beg to say I have very rarely, if ever, seen an opening for capital investment with such good prospects, in my practice of nearly 30 years as a mine agent. I have, within the last four months, visited these mines not less than ten times, and every visit strengthens my opinion. I consider it to be a most valuable property.

JOHN VIVIAN, late Manager of Halamanning Mines.

I worked in Tregurtha Downs on the copper lode near Bray's shaft, on a tribute pitch. The next month my comrades cut the lode rich in copper ore, and got, I think, about £70 each man in one month. I should think, at the present standard, this ore would be worth from £25 to £30 per ton. I know several lodes east of Tregurtha Downs, promising lodes, which must go through Tregurtha Downs sett, and on falling in with the elvan course they are likely to produce both tin and copper. From the reports I have heard for many years, from men I could put the utmost confidence in, and from what I know of the lodes and the locality, I think it to be the best sett in the neighbourhood.

B. GUNDRY, late manager of Wheal Charlotte.

I was shaftman in Tregurtha Downs about 12 months. The engine-shaft fell in with the south lode between the 50 and 60. The 60 is the bottom or deepest place; the lode here is large, but scarcely any ground opened on it, at this level east or west of the engine-shaft. The deeper levels are not extended under the productive ground; there are several lodes and branches which run through the elvan course, producing large quantities of tinstuff. The workings being so shallow, if the deeper levels were brought in, immense quantities of tinstuff might be raised, which, at the present price of tin, would pay considerable profits. If the western part of the mine were cleared out, and the levels driven east to water stile shaft, I consider that it would make as good a tin mine as any in the district.

JAMES FLOYD

Owen Vean Mine is situated in the parishes of Perranuthnoe and St. Hilary. There is a rich lode of grey ore now standing in the 40 and 50 fm. levels, west of Pearce's shaft which would easily set at 3s. in £1 tribute, if the levels were extended in that direction to drain the ground; and this lode runs directly into Tregurtha Downs. There are parallel lodes north and south never yet proved, which I have seen opened on from surface, and which might be cut by a cross-cut from Owen Vean to a very great advantage. Owen Vean lode, being one of the great leading lodes of district, deserves a trial at greater depth; and the ground lying between this sett and Tregurtha Downs, with the grey ore lode running into it, gives a most excellent prospect for any company who may work those mines. What I have here stated is from my personal knowledge and experience, having been underground agent in the last working of the mine from its commencement to within a few months of its suspension.

BENJAMIN GUNDRY.

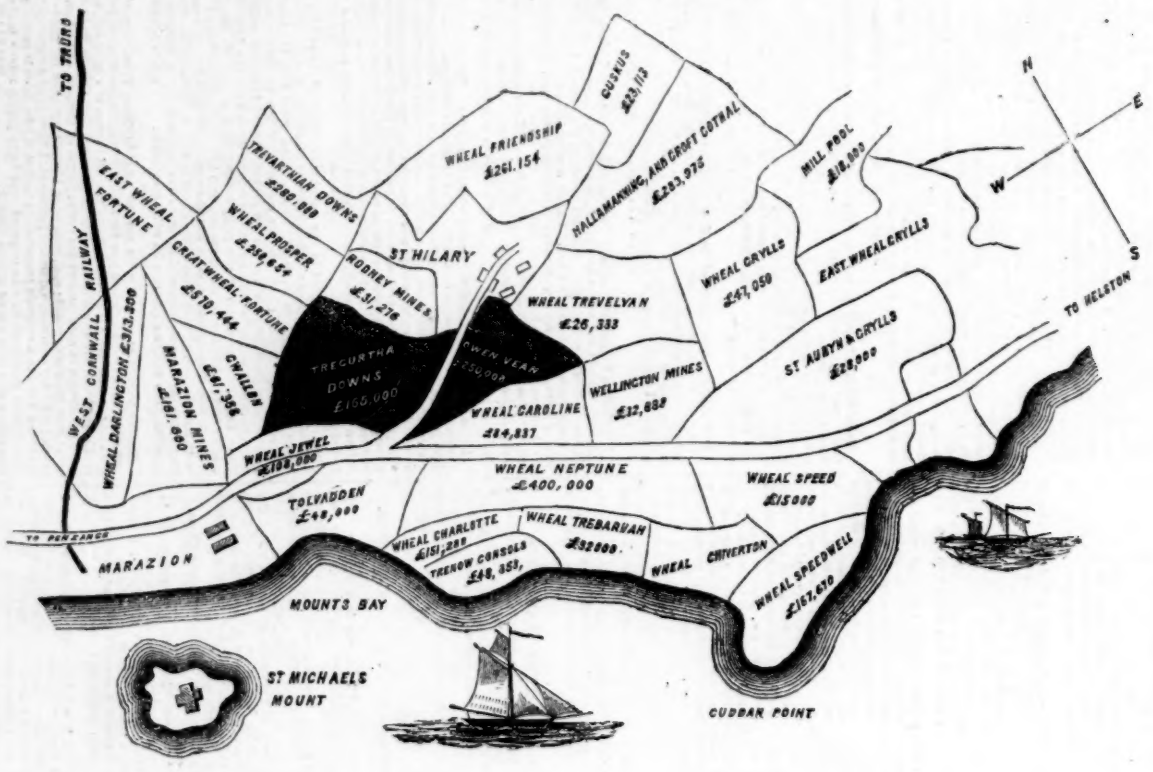
Having worked as a tributer for several years in Owen Vean, from the 30 fm. level and upwards, I desire to inform you Park shaft is sunk to the depth of 40 fms. below the deep adit, where there is a very large lode, with courses of copper ore, worth from £18 to £20 per ton. Tribute pitches were generally worked at from 5s. to 8s. in £1. Several lodes are known to pass through the entire length of the sett, and which have not been seen below the shallow adit; and, from what I have heard from old and practical miners, coupled with my own observation and judgment, I have great confidence in recommending Owen Vean as a valuable property. I believe if this mine is properly worked large quantities of copper ore will be returned, and large profits accrue to the shareholders. This sett is situate in a good mining district.

WILLIAM BAWDEN.

[*For continuation, turn over.*

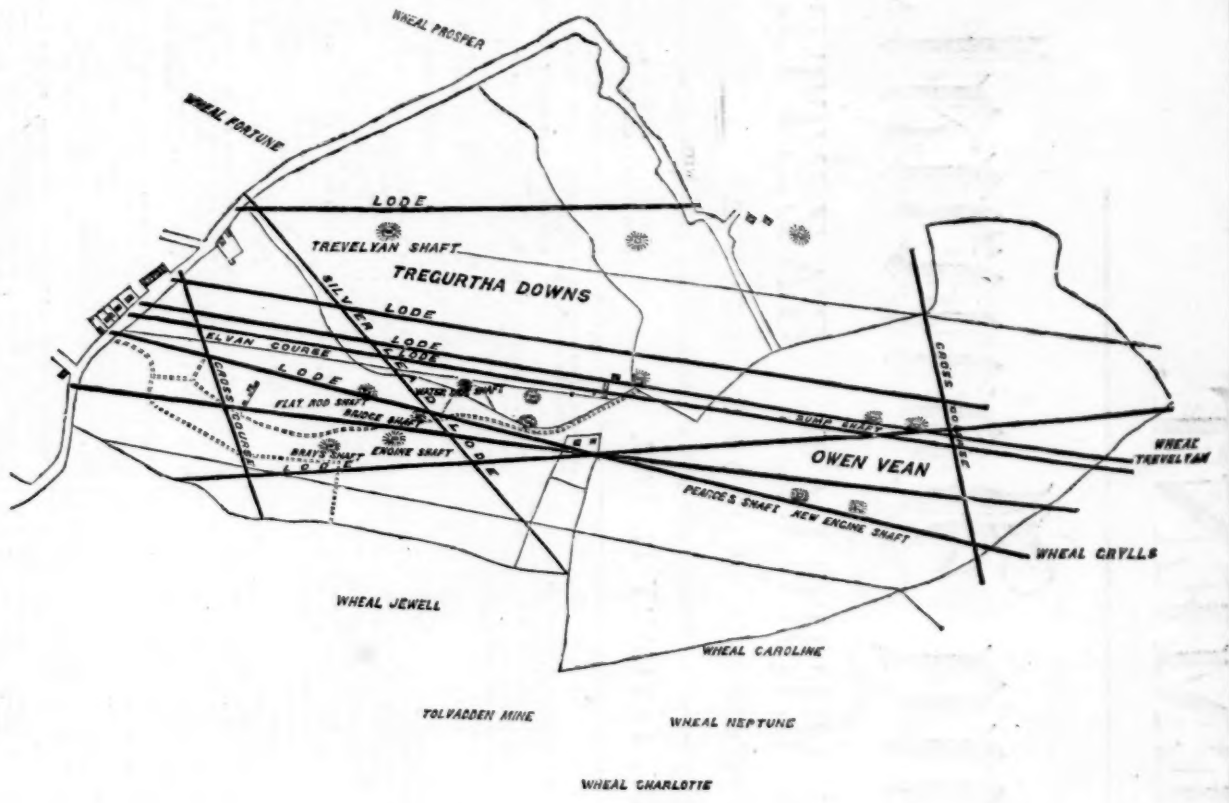
MAP OF THE TREGURTHA DOWNS AND OWEN VEAN DISTRICT,

Showing the neighbouring Mines, and the returns of Copper Ore at their more recent workings. There are no returns of the Tin yielded by them, nor of Copper Ore at their earlier workings. These figures, therefore, show but a part of their actual produce.



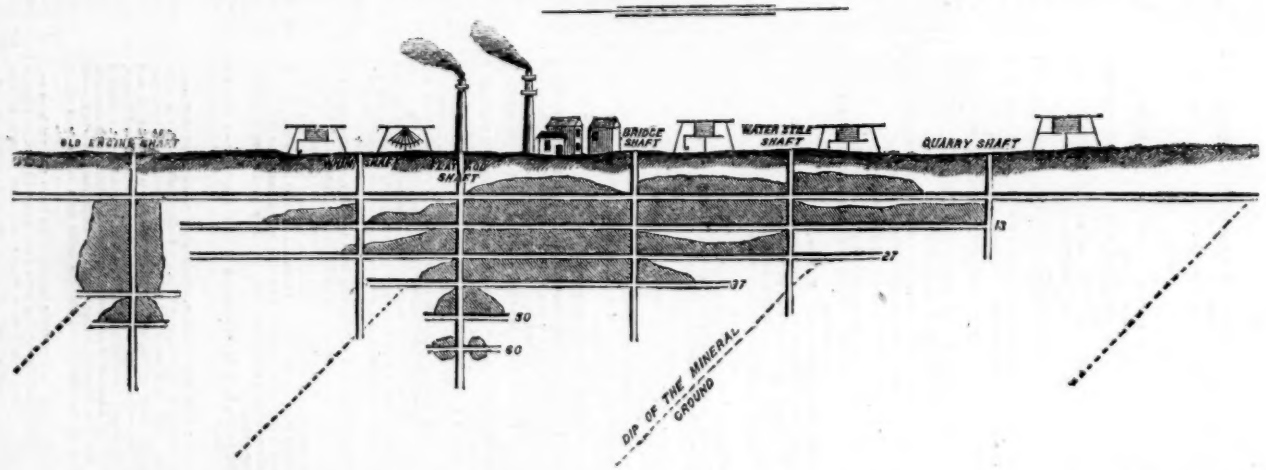
GROUND PLAN OF TREGURTHA DOWNS AND OWEN VEAN MINES,

Showing the Lodes, Elvan Course, and Cross Courses.

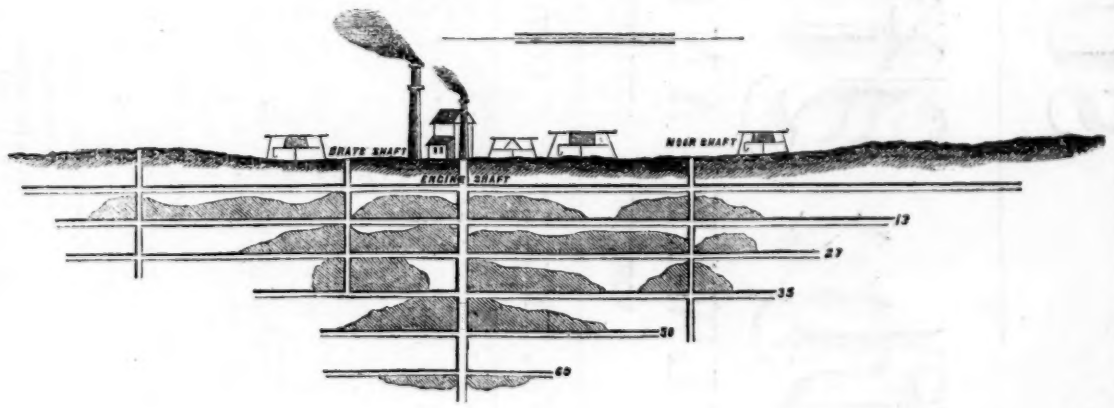


TREGURTHA DOWNS MINE:—

Section of the Workings on Flat Rod Lode.



Section of the Workings on Engine Lode.



A Geological Map and Section, showing the three Granite Hills which encompass the District, with the Porphyry Dykes, &c., traversing the Clay Slate Band, and the Dip of the Shoots of Ore; also a Plan showing the Workings on the North, Middle, and South Lodes, and the Tin Bounds, copied from the Original in the Museum of Practical Geology, may be seen at the Office.

159

SALES OF COPPER ORES.

COPPER ORES SOLD AT THE CORNWALL TICKETINGS, FOR THE QUARTER ENDING DECEMBER, 1862.

Mines.	Tons.	Amount.
Devon Great Consols	6704	£31,811 8 0
Clifford Amalgamated	3612	15,957 18 0
South Caradon	1402	12,606 14 0
East Caradon	1421	10,056 17 6
West Wheal Seton	1669	9,744 8 0
West Basset	1276	6,896 2 0
Phœnix	1494	6,119 10 6
Par Consols	735	5,896 9 0
Fowey Consols	942	5,436 12 0
Wheal Seton	1015	5,227 1 6
Wheal Basset	854	4,806 14 6
Marke Valley	1277	4,550 13 0
Great Wheal Busy	1295	4,078 7 6
East Pool	905	3,796 11 0
Wheal Friendship	451	3,636 4 6
South Wheal Frances	570	3,473 6 0
West Caradon	452	3,064 7 6
South Wheal Tolgus	577	3,026 12 6
Craddock Moor	493	2,981 18 0
Tywarnhaile	985	2,960 13 6
East Carn Brea	475	2,908 10 6
Bedford United	630	2,745 10 0
West Damsel	654	2,697 2 6
Crelake	550	2,583 9 0
Great South Tolgus	292	2,498 13 0
Botallack	334	2,312 3 6
Devon and Cornwall	607	2,286 6 0
North Treskerby	437	2,246 5 6
Carn Brea	565	2,141 14 0
Rosewarne Consols	226	1,906 18 6
East Basset	332	1,788 18 6
Wheal Emma	414	1,785 3 6
North Robert	320	1,769 14 0
Condurrow	502	1,651 7 6
North Roskear	219	1,580 5 6
Tincroft	427	1,528 8 0
Levant	281	1,511 5 6
East Wheal Russell	249	1,373 13 0
Hingston Down	383	1,373 10 0
Pendeen Consols	280	1,344 9 0
Holmbush	200	1,331 16 0
Copper Hill	260	1,324 12 0
Rosewarne United	182	1,305 4 6
Wheal Grenville	213	1,266 8 0
Alfred Consols	325	1,257 14 0
Treloweth	208	1,223 1 6
Great Brigan	173	1,200 1 6
Wheal Buller	209	1,175 5 0
Brookwood	213	1,172 2 6
Bampfylde	73	1,138 6 6
Dolcoath	206	1,101 13 0
North Downs	207	1,095 19 6
Sortridge Consols	168	1,041 3 0
Wheal Anna	188	945 11 6
Tolvadden	177	857 14 6
Stray Park	156	816 17 0
North Grambler	150	781 19 0
Tolcarne	172	774 16 0
Camborne Vean	134	718 0 0
Prosper United	175	714 8 0
East Rosewarne	93	713 0 0
Lady Bertha	251	705 17 0
Yarner	223	701 7 0
Wheal Edward	192	692 17 6
Charlotte United	118	655 7 6
Polmear	140	649 17 6
South Crinnis	153	638 1 0
Great Wheal Martha	546	632 16 6
Kelly Bray	155	604 15 0
Wheal Margery	146	600 17 0
Wheal Uny	79	579 15 0
Carn Camborne	76	574 5 6
Wheal Arthur	171	519 17 0
West Fowey Consols	63	494 11 0
Gunnis Lake	87	494 8 0
Wheal Agar	84	447 4 0
West Stray Park	70	432 5 0
Fursdon	102	407 14 0
Wheal Anna	65	365 12 6
West Trevelyan	35	343 17 6
Hawkmoor	75	320 12 6
East Alfred Consols	80	318 9 6
Treworlis	94	312 8 0
St. Day United	85	298 6 0
South Wheal Crofty	76	295 11 0
East Crinnis	100	287 7 0
Molland	50	276 5 0
Wheal Crebor	66	250 16 0
North Crofty	93	241 8 6
North Basset	66	235 19 0
Grambler and St. Aubyn	39	216 19 6
Camborne Consols	27	213 3 0
South Crenver	88	212 14 0
New Treleigh	54	205 4 0
Gawton	89	200 5 0
Great Wheal Alfred	90	198 7 6
Wheal Harriett	58	165 6 6
Treffry's Regulus	15	160 2 6
West Alfred Consols	130	158 7 0
South Wheal Basset	58	155 1 0
Falmouth and Sperries	55	154 0 0
Burra Burra	45	146 5 0
Wheal Vyvyan	35	144 15 0
Wheal Jane	42	141 18 0
Wheal Emily Henrietta	18	133 4 0
Pedn-an-drea	22	131 9 0
North Hallenbeagle	20	131 0 9
Wheal Rose	28	130 4 0
Great Tregune	14	129 17 0
Great Work	14	125 6 0
Feock Regulus	29	118 3 6
Spearne Moor	7	112 3 6
Wheal Prudence	37	97 2 6
South Carn Brea	27	95 18 0
Crane	11	81 0 6
Perran Mines	24	78 0 0
North Dolcoath	12	77 2 0
South Dolcoath	7	74 5 0
Wheal Unity Consols	15	67 17 6
Tavy Consols	19	63 4 6
Trannack	24	57 0 0
Trenwith's Ore	27	56 0 6
Wheal Henry	13	54 5 6
Furze Park	5	52 0 0
Creegbrawse	9	51 6 0
Wheal Moyle	21	45 6 0
Wheal Damsel	9	44 11 0
West Tolvadden	11	44 0 0
Treseveen	19	42 13 0
West Par	5	42 12 6
Wheal Prosper	6	41 14 0
Collacombe	17	39 2 0
Cuddra	5	39 0 0
Boscaswell	3	38 5 0
East Grenville	13	34 9 0
Cook's Ore	2	24 3 0
Pryor's Ore	4	20 8 0
Wilton's Ore	2	17 3 0
Wheal Nelson	7	16 9 0
Palamountain's Ore	20	15 10 0
Tredinnick's Ore	20	13 10 0
Old Tolgus United	3	9 6 6
Wheal Leisure	4	9 4 0
Pembroke	2	3 17 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Vivian and Sons	6457	£37,592 11 7
Freeman and Co.	2417	14,626 8 3
P. Grenfell and Sons	4854	31,987 11 11
Sims, Willyams, and Co.	6426	33,723 17 2
Williams, Foster, and Co.	4013	23,124 19 1
Mason and Elkington	4936	22,952 14 3
Bankart and Sons	3502	14,619 14 2
Copper Miners' Company	3908	18,808 17 4
Charles Lambert	4403	10,985 14 5
Newton, Keates, and Co.	918	5,430 6 10
Sweetland, Tuttle, and Co.	2107	7,551 5 3
Neath Copper Company	922	4,827 7 9

NEW APPLICATIONS OF ALUMINIUM AND ITS ALLOYS.—Messrs. Bell Brothers, of Newcastle, have recently produced a new modification, which they term "whitened aluminium," in which the unpleasant zinc-like hue of the metal is obviated. They have also formed keys of aluminium, alloyed with 2 per cent. of nickel to increase its hardness. Aluminium bronze is now made of three qualities, the first containing 10, the second 7½, and the third 5 per cent. of aluminium, the residue being copper. These varieties of the bronze are scarcely to be distinguished in appearance from gold; their specific gravity, however, being rather less than that of copper (8·95), differs remarkably from that of the precious metal, the specific gravity of which, when pure, is as high as 19·5. From aluminium wire and foil, the lighter weights used for chemical purposes may be advantageously made, since, occupying something like seven times the space of those of platinum, they are more easily adjusted and handled, and less likely to be lost. The finest aluminium wire, from its insignificant weight, advantageously serves to suspend from the beam of the balance, objects the specific gravity of which is being ascertained. MM. Collett, of Paris, have constructed a chemical balance, in which, not the beam only, but every part, down to the milled head by which the beam is released, is made of aluminium.—*Journal of the Society of Arts.*

SALES OF COPPER ORES.

COPPER ORES SOLD AT THE SWANSEA TICKETINGS, FOR THE QUARTER ENDING DECEMBER, 1862.

Mines.	BRITISH. Tons.	Amount.
Knockmahon	1232	£10,707 12 6
Berehaven	1292	12,184 14 6
British Regulus	58	1,757 10 0
Connorree Precipitate	42	1,347 0 0
Laxey	286	1,319 1 0
Bampfylde	66	1,127 8 0
Ballycummisk	60	614 2 0
Precipitate	10	475 0 0
Lochwinnoch	40	353 11 0
London	14	297 15 0
Burnt Ore	107	262 3 0
Gloster Slag	4	152 0 0
West Kame	35	112 15 0
Schull Bay	14	109 12 6
North Schull Bay	44	41 16 0
Total	3304	£30,862 0 6
COLONIAL.		
Ookip	241	£ 6,962 12 6
Worthing	135	6,125 14 6
Wheal Maria	179	5,739 3 0
New Cornwall	107	2,218 7 0
Kanmantoo	29	1,197 0 6
Mount Rose	37	934 5 0
Bathurst	11	206 14 0
Brada United	42	194 5 0
Spring Creek	5	150 0 0
Mount Gabriel	23	74 15 0
Dun Mountain	43	24 14 0
Total	852	£23,827 10 6
FOREIGN.		
Cobre	1828	£25,870 16 0
Cuba	636	7,991 9 6
Valencia	144	3,006 15 0
La Ventura	95	1,567 10 0
Genoa	139	944 1 0
African	32	751 1 6
Canobolas	47	571 1 0
Seville	50	481 19 0
Victor Emanuel	61	349 11 6
French Slag	53	249 2 0
Piedmont	18	238 1 0
Total	3103	£42,021 7 6
RECAPITULATION.		
British	3304	£30,862 0 6
Colonial	852	23,827 10 6
Foreign	3103	42,021 7 6
Total	7259	£96,711 8 6

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Copper Miners' Company	557	£ 6,169 7 8
Freeman and Co.	740	11,097 16 6
P. Grenfell and Sons	994	12,438 12 0
Sims, Willyams, and Co.	974	11,577 13 0
Vivian and Sons	1232	12,781 10 2
Williams, Foster, and Co.	1414	16,434 10 6
Mason and Elkington	417	5,989 6 6
Bankart and Sons	264	7,839 11 0
Charles Lambert	157	3,225 8 6
Sweetland, Tuttle, and Co.	94	2,694 3 0
Jennings and Co.	167	3,298 12 8
Neath Copper Company	249	3,164 17 0
Total	7259	£96,711 8 6

SALES OF LEAD ORES.

LEAD ORES SOLD FOR THE QUARTER ENDING DECEMBER, 1862.

Mines.	Tons.	Amount.
Lisburne Mines	616	8,089 5 0
Wheal Mary Ann	239	6,096 7 6
Talargoch	364	5,324 7 6
Dyliffe	368	4,973 18 6
Foxdale	200	4,493 0 0
Isle of Man	230	4,293 5 0
East Darren	250	3,823 2 0
Laxey	200	3,545 0 0
South Exmouth	255	3,248 12 6
Cargoll	199	3,112 1 6
Cwmystwith	200	2,565 13 0
Cwm Erfin	162	2,559 14 0
Rhosesmor	187	2,521 9 6
Llanfair	83	2,413 2 6
Herodsfoot	85	2,278 0 0
Roman Gravels	147	1,977 10 6
Bryn Gwlog	140	1,947 0 0
Nanty	140	1,822 1 8
Maesyssaft	134	1,756 5 9
Chiverton	90	1,691 5 0
Bronfloyd	110	1,527 10 0
Dyfngwm	114	1,517 14 6
Wheal Frank Mills	90	1,504 0 0
Parry's	102	1,371 5 0
Llanfyrnach	96	1,300 15 0
Hendra Ucha	89	1,231 13 6
West Chiverton	60	1,162 10 0
Llangynog United	89	1,154 6 0
Tamar	52	1,105 0 0
Newtownards	70	920 10 0
Long Rake	60	803 10 0
Llanerchyraur	53	750 4 6
Tyndrum	67	730 2 0
Cwmbrane	55	694 19 3
Cefn Brwyno	51	665 8 1
Goginan	36	623 3 6
North Minera	42½	535 18 7
Gerstan	40	520 0 0
Pennant	33	472 17 0
Carmarthen United	30	424 10 0
Mill Dam	38	418 15 0
Mount Pleasant	30	382 9 6
Aberdovey	28½	365 9 3
Bryngwyn	26	364 18 0
Deep Level	26	335 9 0
Round Hill	25	331 17 6
Rhoswydol	26	330 7 6
Westminster	24	303 0 0
North Laxey	20	255 5 9
Harwood	20	252 10 0
Minera Union	19	237 15 6
North Porthilly	15	188 2 6
Cae-Conroy	13	182 15 0
Merilyn	14½	172 5 3
South Darren	9	170 18 3
Holywell Level	10	151 0 0
Park	33	144 18 3
Brynambor	10	133 0 0
Wheal Hope	8	118 2 0
Cefn Cilcen	9	116 2 6
Alt-y-Crib	9	115 14 1
Brynford Hall	8½	104 7 0
Orsedd	7	99 4 0
Lord Richard	8	99 0 0
Grosvenor	8	90 16 0
Nant-y-Iago	7	89 5 0
Creetown	9	78 7 6
Lower Park	4	50 8 0

The Eyam Mining Company sold 120 tons.

BLENDE.

Minera	1850	£24,832 9 0
Minera	275	£ 750 15 0

SALES OF BLACK TIN.

BLACK TIN SOLD FOR THE QUARTER ENDING DECEMBER, 1862.

Mines.	Tons.	Amount.
Par Consols	152¼	£10,286 1 2
Great Wheal Fortune	105¼	7,836 2 0
St. Day United	73½	4,306 19 6
Great Wheal Vor	61¾	4,297 12 0
Polberro	54	3,775 0 0
Great Wheal Busy	55¾	3,293 15 0
Drake Walls*	67	4,624 17 9
West Beam	41½	2,911 14 4
Great Work	35½	2,789 10 8
Basset and Grylls	40	2,664 17 11
Wheal Kitty (St. Agnes)	40½	2,661 14 10
West Fowey Consols	30¼	2,032 15 0
Tincroft	24¾	1,580 5 0
Polbreen	21	1,469 9 0
Gurlyn	20	1,288 7 0
Trevenen and Tremenheere	17½	1,214 2 2
South Carn Brea	21¼	1,507 13 3
St. Just United	14	1,003 5 6
Penhalls	11	745 14 11

* This mine also sold arsenic and tungstate of soda amounting to 66*l.* 10*s.*

Mines.	Tons.	Amount.
Pedn-an-drea	10¾	£ 739 5 3
Wheal Hearle	10½	661 3 6
New Birch Tor	8½	591 0 0
East Grenville	8	571 12 4
Great South Tolgus	—	526 9 0
Leeds and St. Aubyn	7½	487 0 0
Cornubia	5	317 15 0
Wheal Prospidnick	4¾	342 0 0
Furze Hill Wood	4½	279 3 0
Cuddra	4	267 0 0
Redmoor	3¾	266 11 10
Brea Consols	3¾	261 6 0
Wheal Vyvyan	3½	247 10 3
West Par	4	229 1 0
Polhigey Moor	3⅛	214 11 0
North Wheal Jane	3	190 19 9
North Basset	2½	166 14 0
West Basset	2½	164 12 4
Wheal Union	2½	150 9 6
Atlas	2	125 14 6

FOREIGN MINING AND METALLURGY.

Attention has been again much occupied in Belgium during the last few days with contracts for rails, and two deliveries have been obtained by Belgian rolling works. The first of these is a lot of 6000 tons for a Spanish railway company, granted to the Charleroi syndicate of works; and the second comprises the rails required for a line from Tamines to Landen, which will be delivered by MM. De Dorlodot. A rather important omission of a final figure occurred recently in an allusion to a quantity of rails, which this important firm is about to deliver to an Italian undertaking; the negociation concluded is for "10,000" not "1000" tons. These different contracts, in giving assured employment to the greater part of the works, have naturally had the effect of causing prices to harden, and at the present time it would be difficult to do business for Vignoles rails at 5*l.* 17*s.* 6*d.* per ton, the terms of the tender accepted at the recent Government adjudication; the scale generally admitted between rails of this class and double-headed is 2*s.* per ton.

In France, several contracts for pig have been concluded at St. Dizier at 5*l.* 14*s.* per ton; the recent rise has not, then, been maintained, and 5*l.* 12*s.* per ton begins now to be mentioned as the maximum price. Irons are also falling; rolled, from wood-produced pig, stand at 9*l.* 8*s.* to 9*l.* 12*s.* per ton, while irons from mixed pig stand at 9*l.* per ton; some forges have reduced the scale between the classes to 4*s.* per ton. The cause of this depreciation in prices is the competition carried on by the works of the Moselle, which are selling at 8*l.* 4*s.* at the establishment, or 8*l.* 8*s* at Metz, with a bonification of 4*s* to 8*s.* per ton for orders of 50 and 100 tons; the scale of difference is 8*s.* between the classes. The forges which are doing business on these terms are, nevertheless, making a suitable profit. It is this metallurgical group which finds itself in the most favourable position, as it possesses very rich and cheap minerals, while it can obtain Belgian and Prussian coke at reduced prices, in consequence of the competition carried on by collieries on the one hand, and the different means of transport on the other. The indemnity due to a surface proprietor, by reason of damage caused by subterranean works executed by concessionnaires of mines, is an important question, which interests in the highest degree persons placed in either position. Recently it has been made the subject of a lively controversy, and has been definitively determined by a decree of the French Court of Cassation. The difficulty consisted in knowing whether damage occasioned to superficial property by interior works executed by concessionnaires, in the exercise of their concession, should be assimilated to the prejudice resulting from the occupation by these last of a part of the upper soil, and should involve the double indemnity prescribed in this latter case by Articles 43 and 44 of the law of April 21, 1810; or whether it should be merely simple according to common right,—in other terms, whether the superficial proprietor was entitled to require from the concessionnaire of a mine an indemnity either double the nett product of the land damaged, or the purchase at double its value, although the concessionnaire might have neither possession nor occupation at the surface, and the damage might only have resulted from some slips or accidental fissures. Hitherto the Chamber of Requests and the Civil Chamber of the Supreme Court had constantly determined that the indemnity must be estimated at the double rate, even in the case of non-occupation. This principle was laid down in decrees of April 23, 1850; Dec. 22, 1852; Dec. 12, 1857; July 17, 1860; and May 15, 1861. Several courts and tribunals thought, on the contrary, that the law of 1810 had intended to confine the double indemnity to the sole case of occupation of a part of the superficial soil, and decided in consequence that damage occasioned in any manner must be referred according to the ordinary rules in the matter of indemnities,—that is, by virtue of Article 1382 of the Code Napoleon. This latter principle has just been solemnly affirmed by the United Chambers of the Court of Cassation,—a solution which appears to be in accordance with right and equity. It will be readily understood that when the framers of the law of April 21, 1810, attributed to concessionnaires the right of depriving a surface proprietor of parts of his land, of which the necessities of their working might require the occupation, they should have thought it right, as a set-off for this necessary and exorbitant privilege, to grant to the proprietor an exceptional indemnity, which they fixed at double the value of the land. But the principle does not apply when the concessionnaire has no occupation of the upper surface, and when the damage is only the indirect consequence of subterranean works. In this case the concessionnaire finds himself in the same position as any other proprietor, who, exercising his rights, and carrying out works on his property, occasions some injury to his neighbour, and who must then be held bound either to make good the damage which he has caused, or furnish a money equivalent.

Metallurgy is one of the most important industries carried on in Sweden, and the exceptional superiority of the wood-produced irons turned out is generally recognised, so that the exportation of them is considerable. In order to supply "industrials" with the capital which they require, an "Iron Bank" has just been formed in Sweden, and is expected to render great services. Although this bank may possibly not embody a new principle, it may be interesting, nevertheless, to detail its mechanism. The function of the bank is to assist each member of the association by which it is established by lending him a sum of money, proportioned not to the quantity of iron which he has manufactured, but rather to that which he is authorised by his concession to produce. Loans are not made, then, upon goods in stock, but they are rather advances upon future products. The funds of the bank are also applied to the maintenance of a School of Mines at Falhun, to the payment of expenses attending experiments aiming at the amelioration of processes of fabrication, analyses of minerals, foreign journeys, &c. The bank enjoys, besides, a credit at the Bank of Sweden, and when its original capital is insufficient its position towards that institution is still exceptional, and different from that of other borrowers. The Bank of Sweden grants loans to iron industry at 3 per cent. on iron manufactured and placed in the general warehouses. Every forge-master, properly so called, or any merchant who has brought the products of a forge—every individual, in a word, who can support his claim by a deposit of iron at a warehouse—has a right, to which the bank cannot refuse to accede, to a loan proportioned to the quantity of iron inscribed on his account. It fixes itself the quota of the loan to be made per 2 cwts., taking as its basis the average sale price, the course of which is fixed every year at the iron fair, which is held on the shores of Lake Werern; the loan generally represents three-fourths of the value deposited in the warehouses. The bank makes analogous loans on deposits of metals generally, such as copper, gold, and silver, and at the same rate of interest (3 per cent.) The advantages which the Bank of Sweden has thus conferred on forge-masters and holders of metals may be inferred from the fact that it gives them the right of borrowing at rates 2 per cent. below the terms on which its discount department makes advances, while it does not require, besides, any repayment so long as the security remains in warehouse.

The metal markets of the Continent have not exhibited much change. Paris has been calm for copper, English being quoted at 99*l.*; tough cake, 98*l.*; Lake Superior, 107*l.*; and Chilian, 91*l.* The Havre market presents very little interest, transactions being almost *nil;* Chilian and Peruvian, in bars, have been quoted 90*l.* 4*s.*; Baltimore, 98*l.*; Lake Superior, 102*l.* to 104*l.*; and Mexican, 80*l.* per ton. At Cologne, Berlin, and Stettin there has been no change to note. Tin maintains its price in most markets, transactions being, however, generally limited to the requirements of consumption. At Paris, Banca has been quoted 127*l.*, Detroit, 121*l.*, and English 115*l.* The Berlin and Cologne markets have been calm, and without variation. Prices of lead have been well supported at Paris, Spanish pig being quoted 22*l.* 12*s.*, French 22*l.*, and Belgian 22*l.* Havre has been calm, with no transactions worth mentioning. At Hamburg, where there was a few weeks since a good enquiry for lead—to some extent on American account—the demand has now shown very little animation, and prices have been almost nominal. There has been less activity in zinc in the Paris market; rough Silesian remains at 18*l.* 8*s.*, and rolled at 26*l.* per ton. From the Breslau district, it is stated that the production of the year which has just expired was 750,000 centners; the average price of rough zinc was a fraction—but only the merest fraction—in excess last year of the mean quotation for 1861.

Sicily is a sulphur district, *par excellence;* its territory contains it everywhere, and often in such abundance that it is extracted in the same fashion as that in which metallic minerals are drawn from the earth in other countries. The mines of Sicily are, however, little known, and have never been seriously prosecuted; and a work which M. de Rechter, engineer-director of the sulphur mines of Sommatino, has just published on the subject consequently possesses considerable interest and value. The author remarks that Sicily lacks means of communication, both internally and externally, and that at present, notwithstanding the riches which it contains, it is isolated in the midst of the Mediterranean. It is especially internal means of communication which are defective, and strike with financial sterility mines most abundant in sulphur, when they are at some little distance from seaports. The sulphur mines of the island are almost all comparatively distant from the sea, three or four only, those of Girgenti, Commitini, Arragona, Palma, and Siciliana being exceptions to the rule. The nearest to Palermo are those of Percara degli Freddi, which are 35 miles from that town. The richest sulphur province is that of Caltanisetta, which produces annually upwards of 120,000 tons. Sulphur, before reaching the port of embarkation, has often to traverse 40 miles, and to whatever point it is desirable to direct it there is not at present any completely finished carriage road. The greater part is forwarded to Licata, the second entrepot of Sicily, and a small town which owes all its importance to sulphur. The transport is effected on the backs of mules for half the distance, and in the midst of the most difficult mountains of the island. So costly a transport is certainly a very grave obstacle in the way of a satisfactory development of the mines, but there are, perhaps, still greater difficulties to overcome, arising from ignorance and routine. The mines have not had at present any regular direction, but have been abandoned to ignorant foremen, who, like all their compatriots, have an instinctive aversion to anything new or unknown to them. Hence arises a complete absence of method, and the state of the mines may be readily imagined. The extraction is effected on the backs of children, and the drainage machines almost exclusively in use are hand pumps, arranged at intervals along the inclined galleries. A few years since not a single steam-engine was at work in the mines, and even now there are scarcely more than three or four, all badly fitted up, and almost all of insufficient power. M. de Rechter draws an animated picture of the sad state into which the carelessness of the laws has thrown the working of sulphur in Sicily. An obstacle not less great in the way of progress and improvement is the indifference of the Government, which has never seen that regulations have been observed. Notwithstanding, however, all obstacles, notwithstanding that the Sicilian mind is little addicted to bold enterprises, notwithstanding the carelessness of the Government, notwithstanding unfavourable local circumstances, notwithstanding the high price of labour, wood, and all materials, the mines are continually increasing in importance; and the present annual production has attained a total of

187,500 tons, representing a value of 1,280,000*l.*, and a nett profit of at least 480,000*l.* This is no inconsiderable total, seeing that the profits of coal mining industry in Belgium are not calculated at more than 680,000*l.*, and in France at 1,200,000*l.* per annum. What, argues M. de Rechter, might not the sulphur mines of Sicily become with a vigorous and talented management?

MINING PHOTOGRAPHS—No. VI.

"THE MINE SALE."—The *finale* of a mine adventure is no unimportant, but is an imposing affair, if of any considerable magnitude. Both these terms may be applied in double *entendre*, each application being equally apposite. Important it undoubtedly is to Mr. ——, auctioneer, and the bargain-hunters usually attendant on such occasions; important, in truth indeed, is it to the disappointed shareholders, yet in how different degrees to each so concerned! To the former, a windfall and a benefit; to the latter, a fall indeed—a blast of their fondest hopes and anticipations; realising to the life the apothegm and sadly o'er true tale, that what is ones man's food is another man's poison. Imposing is it to see the array of business and no-business bodies who attend such scenes, the majority to prey upon the wreck which law, too frequently driven by ignorance, has created. If the fangs of its myrmidons be once placed on the victim little chance of escape remains. After battening to repletion, the refuse and remains are handed over to harpies, who devour and destroy without compunction. To all who have ever been to a sale of materials on a discontinued mine the application of the proem above-recited in its double sense must be self-evident. To those who have not had that opportunity we propose a Photograph, which we trust will be to them what the panorama is to the tarry-at-home traveller—to ensure a faithful representation of the scene, without the discomfort of a wet jacket; for, gentle reader, be it known it rains at a mine sale as truly as it does so nine days out of twelve in Manchester or Pontypool.

No sooner is the judicial fiat pronounced, the commission for the sale issued, and the order given to good Mr. ——, under "certain restrictions and conditions," known only to legal gentlemen and Mr. ——, than this worthy betakes himself to his office or study, to George Robin-ise the property. No compliments to his employer, or glowing descriptions, are deemed too lavish to express his estimate of the favour conferred on him, or of his high opinion of the value of the property. This is sometimes carried to such excess as to excite the merriment of those who understand the real state of the matter. One condition is seldom omitted—"Refreshments will be provided at the commencement of the sale, and at the conclusion for purchasers." This is a most important and imposing item in the showy advertising handbill forthwith issued, as it is far more certain to secure a numerous attendance than the intrinsic value of purchases to the majority of purchasers. Mr. —— feels and expresses himself in grandiloquent terms how highly he is honoured on the occasion, which honour he displays in the shape of consequence and bustle—a pardonable frailty. Turkey cock-like he struts about, and counts up the probable gross assets of the sale—*ergo*, his gains—whilst the poor adventurer stalks like a ghoul, or, like Volney, sits and studies the wreck and ruin of empires, or of what was of paramount importance to him. There lies the debris—the remains of what so lately was proudly looked upon as valuable property—drawn from their dark recesses, dislocated, broken, mutilated, or hurled from their proud positions, exposed and ignominiously treated. Yes, these tremendously costly items and specimens of engineering ability that had, perhaps for years, made such frightful costly particulars of merchants' supplies in the monthly cost-sheets, now made palpably evident to the sight of where all the enormous supplies have been employed. There they lie, confused masses of pumps, bobs, II-pieces, glands, strapping plates, match pieces, old timber, scrap-iron, and all the thousand-and-one things usually discovered on all occasions when a regular turn out takes place, so that it pretty well resembles a sacked dockyard. The number and variety of materials fairly stagger the adventurer, who involuntarily ejaculates—"Well, after all I did not think there was half the stuff here; I can now perceive, in some degree, how the money goes in mining undertakings."

The day of sale having arrived, a motley group gradually assembles, of all grades and conditions in society, from the gay post-chaises of the auctioneer and law agent, the burly-faced mine captain, the bargain hunters, and resident farmers, down to the hobnailed boor, the unemployed miners, or sturdy beggar boys, who go, they say, to see what is going on, but in reality to get a "drop of summat," as they are sure to read the magic words "refreshments provided," and hope to share in the spoil. This is sometimes carried out to a shameful extent, but, of course, is put down to the cost of the mine sale. After waiting an unduly long time, the auctioneer appears, hems two or three times, and delivers his exodium—the conditions of sale,—which generally elicits some grumbling remarks, one party desiring the whole to be sold in one lot, another fully understanding the sale was to have been in detail, and others wanting only particular portions. This over, the tables are turned on Mr. Auctioneer, everything is found fault with, or is valueless, for no measured terms are used to depreciate the property. There invariably happens to be a favourite or an auctioneer's agent present, who gets, or "picks up," the best bargains at a nominal price. In a short time the same articles may be seen in the broker's yard at cent. per cent., and something more, advance. As the property is seldom required in the locality, there is usually a tremendous sacrifice on such sales, in addition to the charges otherwise laid on when a company of adventurers have to pay the piper; it is, therefore, no wonder the assets are generally so trifling and disappointing. Many are the merry jokes and boisterous laughs at some would-be witty sally of Mr. ——; in the meantime the refreshments go merrily round, little heed being had to expenses.

Ninety-nine out of a hundred of these cases arise not from the poverty of the mines, still less from their exhaustion, but from the wilful obstinacy of some grumbling, discontented shareholder, who because he cannot have his own way precipitates the adventure into ruin. He thinks it is only to run to the lawyer, get him to meddle, and he will be enabled to be the cock-of-the-walk, and dictate. We could enumerate many hundreds of instances to the point, in which the small cloud has grown from the size of a man's hand to an overwhelming storm, such storm sweeping all before it, even to the scenes we have described as the mine sale. We have known one in which the neglect of payment of 8*l.*, arrears of wages, led to writs being issued to sundry adventurers, who, imagining themselves to be aggrieved parties, plunged the affair into a Chancery suit, whence it came not out until the mine sale took place; the property that cost thousands sacrificed for an old song. The adventure, and adventurers too, were overwhelmed in one common fate of ruin, after endeavouring to extricate themselves and their promising mine from impending ruin. Had the obstreperous shareholders possessed common sense and common honesty, instead of throwing their property away in such folly, endeavoured to agree instead of quarreling, they would have realised and enjoyed the prize which has fallen into other hands.

In this paper our purpose is not to condemn or prejudice mining—far otherwise; it is to caution adventurers against precipitate law actions, and discontented committees; for, as certainly as discord enters their councils, it is ten to one they witness the destruction we have endeavoured to describe; that they will subject themselves to the prying of the harpies, from the principal officer to the hob-nailed boor, who will laugh in their sleeves whilst they quaff the refreshment provided at the cost of the mine; and that they will have the melancholy mortification, when too late, to be as Volney or Marius, and wonder at the folly and proneness of their fellows.

We know that under the limited liability mode of working mining companies the risk of incurring debts which nobody is willing to pay is far less imminent than under the old Cost-book System; still we know, from painful experience, many causes arise, even under the new and improved *regime*, by which mining speculations are, and will be, brought to ruin, to which end nothing can be more conducive than dictatorial chairmen, ignorant committees, and grasping directors. We implore all who may be subject to such annoyances to endeavour to meet them by temperate timely advice, such as is the end and aim of our essay, when they will see fewer sacrifices in the shape of mine sales, and we trust will never have cause to lament over the subject of our Photograph, which may be depended on as being faithful in every particular, in cause and effect; and we appeal to hundreds of mining men if they have not witnessed many parallels in their experiences. That the paper may have the effect it is intended to create is the sincere wish of— GEORGE HENWOOD.

SPILL'S MACHINE BELTING.—Messrs. Spill and Co., of Hackney Wick, have taken out a patent for machine belting, the peculiarities of which are that it is made of the best flax yarn, and woven into one solid mass by powerful steam-power looms, all this warp, or shuttle twine, being first soaked in water, so that the rack, on shutting the warp up into its place, may not meet with any of the opposition that hard yarn would present. The belting is made in three substances, and India rubber, of the very best quality, is passed on to the band while it is travelling through rollers, so that the gum may be squeezed into every opening, or partition, between the mass, thus rendering the whole more pliable, stronger, and about half the price, in wide bands, than is paid for leather. The bands in question can be laced with a common thong, in the same way as leather, and are equally free from trouble. No. 3 substance has 90 warps to the inch, and each warp is capable of sustaining a strain of 50 lbs. Official experiments applied to these bands testify to the above facts.

MANUFACTURE OF TEA LEAD.

In our Annual Review of the Metal Trade, published in the *Mining Journal* of December 27, reference was made to the circumstance that the favourite China brand of WB. lead does not now realise so much as formerly above ordinary brands, and it was remarked that the falling off in the demand for WB might be attributable to the large shipment of English manufactured tea lead, which has now become an important branch of our export trade with tea-producing countries, and which, no doubt, supersedes the native-made foil, for the finer kinds of which the WB. lead was so much sought after by native manufacturers. The increasing demand thus alluded to has naturally led to the introduction of improvements in the process of manufacture, one of the most important, perhaps, being the invention of Mr. Jabez Jones, of Springfield Leadworks, St. Ann-street, Liverpool, longitudinal and transverse vertical sections of whose apparatus are here given. The object of Mr. Jones's process is to manufacture lead and other metals, when in a state of fusion, into sheets of any length and thickness, by means of hydraulic pressure. The advantage which Mr. Jones claims is that the sheets are manufactured at a much less cost than

Fig. 1.

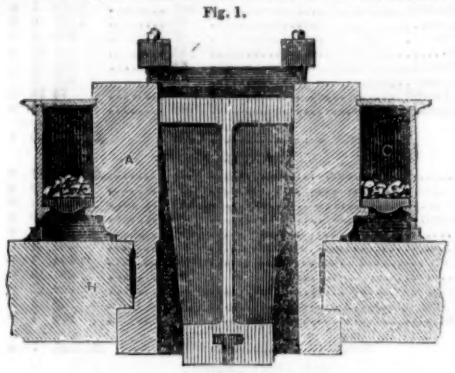
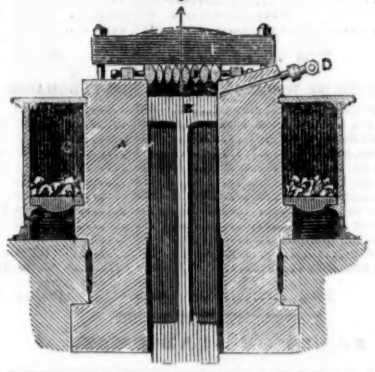


Fig. 2.



by any other process, and that there is no loss of metal. The apparatus consists of a stout cylinder of iron, or other suitable metal, heated by surrounding the external vertical side thereof with fire, or in any other convenient way. This vessel, which is used to contain the molten metal to be converted into sheets, is placed immediately above an hydraulic press, the head of the ram of which forms a piston working within the cylinder, which is used to force out the metal through a die or dies fitted on to the top of the cylinder. These dies may be kept cool by water passing through internal passages formed through them. The sheets of metal, as ejected, are received on rollers, and are immediately ready for use. The molten metal for supplying the cylinder is placed above, and communicates therewith by a pipe, which is kept heated to cause the metal to flow freely through it. After the piston has forced out the charge contained in the cylinder through the dies, a valve is opened which admits a fresh charge of molten metal from the supply vessel during the down-stroke of the ram, which is again forced out through the forming dies at the upstroke of the ram, as before, and so on until the sheets have attained the desired length. Mr. Jones observes that the sheets so made can, without any additional labour, be coated with tin, thus preserving the lead from presenting the dull colour distinguishable in other English made lead on its arrival in China. Sheets can also, he continues, be made for plumbers' purposes, which, when coated with tin, will be in great demand for water cisterns, tin being impervious to the action of water.

With reference to the above diagrams, the upper is the longitudinal and the lower the transverse vertical section of the apparatus; the letters refer to the same parts in each. A is the vessel for containing the liquid metal to be operated upon, and in which works a piston actuated by a hydraulic press placed immediately below; C, an enclosed fire-grate surrounding the apparatus, for heating and retaining it at a sufficiently high temperature to keep the metal contained therein in a fluid state; D, a valve-plug for closing the orifice used to charge the apparatus with the molten metal. E are the die-plates, between the bars of which the metal is forced by the upward action of the piston, the metal becoming solid immediately on coming into contact with the air, where it is received on rollers, or in any other convenient way. In some cases, to facilitate the cooling of the sheets of metal, the bars of the die-plates are formed hollow, and a current of cold air or water is caused to pass through them, and in some cases a blast of cold air is passed over the die-plate and between the sheets of metal as they are delivered from the die. Transverse bars, F, are bolted to the head of the apparatus for holding the die-plates in position, and set-screws are provided for regulating the thickness of the sheets. H is the bed-plate, which forms the top of the hydraulic press, and upon which the upper portion of the apparatus rests. It is proposed to form a public company for purchasing and carrying out the invention, and, as the process is particularly applicable to the manufacture of tea lead, it is confidently believed that large profits will result.

NEW DOUBLE-ACTING PUMP.—On Saturday week a series of experiments, with a view of testing the efficiency of the double-acting pump and fire-engine, invented by Mr. Delpech, were made at the wharf of Messrs. Francis, Son, and Potts, at Nine Elms. The arrangement of the apparatus consists of an external metallic casing, divided into two distinct portions, the one containing the cylinder in which the piston moves, and which is called the cylinder chamber, whilst the other contains four elastic balls, acting as valves or clacks, and is called the ball chamber. The cylinder chamber is divided into two parts by a diaphragm. This partition is provided at its centre with a round opening for the cylinder, which is open at both ends, and between its extremities and the chamber ends a space is left for the circulation of the liquid. The ball-chamber is also divided internally into two equal compartments by a vertical partition, each, however, communicating by a wide opening with one of the compartments of the cylinder. The principal feature of the pump, however, is the piston, which consists of two flexible cups, turned back to back, and kept in position by metal plates, considerably smaller than the diameter of the cylinder. The object of this arrangement is to reduce friction to the minimum. The advantages claimed for the pump are—that the liquid undergoes no interruption of motion from the dead point; that its effective force is extraordinary, as it yields nearly 70 per cent., and that mixture of ore, rags, or other foreign matter with the water does not interfere with its working, all things not exceeding one-half the diameter of the suction-pipe being easily pumped through. Our readers will at once see that the principle of the pump is precisely the same as that involved in Warner's double-acting pump, and Godwin's floot-pump, as well as some others; but he has introduced modifications, or improvements, in the piston, which cannot fail to pack very tight, and in the substitution of ball-valves for the usual clack-valves. Comparative and competitive experiments are, we understand, contemplated, in order that all doubts as to the superiority of the Delpech pump may be removed.

CONCENTRATING MACHINE.—The revolving blanket introduced, improved, and patented by Mr. Thomas Carpenter, M.E., is under test at the Catherine Reef United Company's Works. We can say but little about it at present, so far as results are concerned, it having been so short a time in operation. Practical men, however, are inclined to regard it favourably, and we should not be surprised to see it ultimately very generally adopted. The blanket is what may be termed an endless one, fixed on strong canvas, and by means of rollers constantly travelling upwards to meet the stuff from the ripples. In its course underneath it passes through a cistern of water, that cleanses it from the metallic accumulation. It is thus always presenting a clean surface to the stream, without the necessity of an attendant to wash the blanket. The table over which it travels is about 5 feet wide, and 15 feet long; and as the blanket takes just half an hour to complete the circuit, 350 square feet of clean blanket surface presents itself every hour.—*Victoria Mining Record.*

International Exhibition, Class 8 and 9—Prize Medals.

CLAYTON, SHUTTLEWORTH, AND CO have been AWARDED PRIZE MEDALS for the "good arrangement, good workmanship, and practical success" of their steam-engine in Class 8, and "for their steam-engines and threshing machines" in Class 9.
CLAYTON, SHUTTLEWORTH, and Co., Agricultural and General Engineers, Lincoln, and 78, Lombard-street, London.

International Exhibition, 1862—Prize Medal.

JAMES RUSSELL AND SONS (the original patentees and first makers of wrought-iron tubes), of the CROWN PATENT TUBE WORKS, WEDNESBURY, STAFFORDSHIRE, have been AWARDED a PRIZE MEDAL for the "good work" displayed in their wrought-iron tubes and fittings.
Warehouse, 81, Upper Ground-street, London, S.

International Exhibition, 1862—Class 1.

Catalogue, No. 199. { JURY AWARD of HONOURABLE MENTION, given to Ellis Lever, "for convenience and efficiency" in ventilating mines, "especially in cases of emergency," with brattice, door-cloth, and flexible tubing, as exhibited and manufactured by him.

ELLIS LEVER, WEST GORTON WORKS, MANCHESTER, begs respectfully to inform all owners and managers of collieries, ironstone, lead, or copper mines, that he is PREPARED to SUPPLY the FLEXIBLE TUBING, in any lengths, and from 6 in. to 24 in. diameter. BRATTICE and DOOR-CLOTH in any width or length, AIR-PROOF, FIRE-PROOF, or WATER-PROOF. A large stock of every width constantly ready for immediate dispatch to any part.
ELLIS LEVER, MANCHESTER.

Prize Medals—International Exhibition, Class 1 and 2.

PATENT PLUMBAGO CRUCIBLES.—The CRUCIBLES manufactured by the PATENT PLUMBAGO CRUCIBLE COMPANY are the ONLY KIND for which a MEDAL has been AWARDED, and are now used exclusively by the English, Australian, and Indian Mints; the French, Russian, and other Continental Mints; the Royal Arsenals of Woolwich, Brest, and Toulon, &c.; and have been adopted by most of the large ENGINEERS, BRASSFOUNDERS, and REFINERS in this country and abroad. The GREAT SUPERIORITY of these melting pots consists in their capability of melting on an average 40 pourings of the most difficult metals, and a still greater number of those of an ordinary character, some of them having actually reached the EXTRAORDINARY NUMBER of 96 meltings. They are unaffected by change of temperature, never crack, and become heated much more rapidly than any other crucibles. In consequence of their great durability, the saving of waste is also very considerable.

The company have recently introduced CRUCIBLES SPECIALLY ADAPTED for the following purposes, viz.:—MALLEABLE IRON MELTING, the average working of which has proved to be about seven days; STEEL MELTING, which are found to save nearly 1¼ ton of fuel to every ton of steel fused; and for ZINC MELTING, lasting much longer than the ordinary iron pots, and saving the great loss which arises from mixture with iron.
For lists, testimonials, &c., apply to the Patent Plumbago Crucible Company, Battersea Works, London, S.W.
Fully described in the MINING JOURNAL of July 5.

BARCLAY'S PATENT STEAM AND WATER PRESSURE AND VACUUM GAUGES.

These GAUGES are MADE to INDICATE ANY PRESSURE from ONE to TWENTY THOUSAND POUNDS upon the SQUARE INCH.
EACH GAUGE is GUARANTEED FOR FIVE YEARS.
PATENTEE AND MAKER,
ANDREW BARCLAY,
ENGINEER,
KILMARNOCK.

PUBLIC TEST OF WIRE-ROPE.—The SUPERIOR QUALITY of GARNOCK, BIBBY, AND CO.'S WIRE-ROPE was FULLY PROVED by a RIVAL MANUFACTURER at the LIVERPOOL PUBLIC TESTING MACHINE, on the 29th of October, 1860, on which occasion GARNOCK, BIBBY, and Co.'s ropes were found to be the STRONGEST of all the TWELVE SAMPLES from different makers then tested, as reported in the papers of the day. For example:—
(Certified by Mr. William Macdonald, superintendent.)

Sizes.	Garnock, Bibby, and Co. Tons c.	Corresponding sizes from other manufacturers. Tons c.
3½ in.	18 5*	16 10 ..... 11 10
2½ in.	8 15*	7 15 ..... 5 0

Remaining sizes with similar results.
* Samples taken promiscuously from stock by a rival manufacturer's agent.
GARNOCK, BIBBY, AND CO.,
SWAN HEMP AND WIRE ROPE MANUFACTURERS,
LIVERPOOL.
FLAT and ROUND STEEL and IRON WIRE ROPES for MINES, &c., of SUPERIOR QUALITY.

BASTIER'S PATENT CHAIN PUMP APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, MARINE, FIRE, &c.
J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects, armers, and the public in general, to his new pump, the cheapest and most efficient ever introduced to public notice. The principle of this new pump is simple and effective, and its action is so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shafts, and unites lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells of any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion. The following statement presents some of the results obtained by this hydraulic machine as daily demonstrated by use:—
1.—It utilises from 90 to 92 per cent. of the motive power.
2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.
3.—It occupies a very small space.
4.—It raises water from any depth with the same facility and economy.
5.—It raises with the water, and without the slightest injury to the apparatus, sand, mud, wood, stone, and every object of a smaller diameter than its tube.
6.—It is easily removed, and requires no cleaning or attention.
A mining pump can be seen daily at work, at Wheal Concord Mine, South Sydenham, Devon, near Tavistock; and a shipping pump at Woodside Graving Dock Company (Limited), Birkenhead, near Liverpool.
J. U. BASTIER, sole manufacturer, will CONTRACT to ERECT his PATENT PUMP at HIS OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will GRANT LICENSES to manufacturers, mining proprietors, and others, for the USE of his INVENTION.
OFFICES, 47, WARREN STREET, FITZROY SQUARE.
London, March 21, 1859. Hours from Ten till Four. J. U. BASTIER, C.E.

AUSTRALIA, NEW ZEALAND, AND BRITISH COLUMBIA.
WHITE STAR LINE OF EX-ROYAL MAIL CLIPPERS,
SAILING FROM
LIVERPOOL on the following dates:—

Ship.	For	Register.	Burthen.	To sail.
ARABIAN	Melbourne	1008	2000	Jan. 20.
LORD RAGLAN	Melbourne	1904	3500	Feb. 20.
WHITE STAR	Melbourne	2339	3000	March 20.

The clippers of this line are noted for their superior accommodation, punctuality of sailing, and rapid passages.
For freight or passage apply to the owners, H. T. WILSON and CHAMBERS, 21, Water-street, Liverpool; or H. T. WILSON, COOKE, and Co., 27, Leadenhall-street, London; or to GRINDLAY and Co., 55, Parliament-street, and 124, Bishopsgate-street, London.

LEICESTER AND CO. (late Leicester, Brache, and Teague), CONSULTING MINING ENGINEERS AND SURVEYORS, AND GENERAL MINING AGENTS, MELBOURNE, VICTORIA, PROCURE MINING LEASES on ELIGIBLE TERMS from the GOVERNMENT of VICTORIA and NEW SOUTH WALES, on receipt of a remittance for £200, to cover costs of lease, survey and report, &c. Messrs. LEICESTER and Co. OFFER to TAKE the MANAGEMENT of MINING COMPANIES, and PROVIDE OFFICE ACCOMMODATION, for a percentage on the profits of the company.
All remittances must be made through our bankers, the Union Bank of Australia.
For further particulars, apply to Mr. RICHARD MIDDLETON, *Mining Journal* office, 26, Fleet-street, London, E.C.

THE BUILDING NEWS.—An Illustrated Journal, price 4d., devoted to Architecture, Civil Engineering, the Arts of Design and Building. It contains original and practical Essays on Fine Art and on the Principles and Practices of Construction, Notices of New Buildings in all parts of the kingdom, Reports of Architectural and Scientific Societies, Notes on Church Decorations, Memorials and Stained Glass; Sanitary, Gas, Water, and other intelligence; Improved Dwellings for the Working Classes; Lists of Tenders received, and of Competitions and Contracts open; suggestions (oftentimes illustrated) on subjects specially interesting to Architects, Builders, Contractors, and their Employes; correct weekly lists of all new patented inventions connected with every branch of the building trade, and a variety of interesting miscellaneous matter.
London: 26, Bouverie-street, Fleet-street, E.C.

LONDON: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH, the proprietors), at their office, 26, FLEET-STREET, where all communications are requested to be addressed. [JAN. 17, 1863.